

Department of Homeland Security (DHS) Chemical Facility Anti-Terrorism Standards  
(CFATS) Final Rule:

Appendix A and Top-Screen FAQs

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## Accessing Appendix A

### *Has DHS released the final version of Appendix A?*

Yes, Appendix A with the final Chemicals of Interest List was published in the Federal Register on Tuesday, November 20, 2007 and became legally effective on that date. The Federal Register citation is 72 FR 65396.

### *Where can I get a copy of Appendix A?*

The list is available through the DHS website at [http://www.dhs.gov/xlibrary/assets/chemsec\\_appendixa-chemicalodinterestlist.pdf](http://www.dhs.gov/xlibrary/assets/chemsec_appendixa-chemicalodinterestlist.pdf). The Interim Final Rule, 6 CFR Part 27, is available at <http://a257.g.akamaitech.net/7/257/2422/01jan20071800/edocket.access.gpo.gov/2007/E7-6363.htm>.

## **Timelines**

### ***What is the deadline for compliance with the rule?***

Any facility that possesses (or later comes into possession of) the listed chemicals in quantities that meet or exceed the screening threshold quantity (STQ) of those chemicals must complete and submit a Top-Screen to DHS within 60 calendar days of the publication in the Federal Register of the Final Rule and Appendix A. A facility must complete a Top-Screen within 60 days if it later comes into possession of chemicals that meet or exceed the STQ.

Thus, the deadline for compliance is Saturday, January 19, 2008. If you have applied for a 60-day extension, the deadline is March 20, 2008.

### ***Is there a way to get extra time to complete and submit the Top-Screen?***

DHS has stated that they will accept requests from colleges and universities for up to an additional 60 days (see 6 CFR Part 27, Part II, pg. 65412 in Federal Register, November 20, 2007). A suggested template letter developed by CSHEMA is available at <http://www.cshema.org/about/dhs.cfm>.

### ***Who can sign the letter requesting extra time for the Top-Screen?***

Page 65412 of the preamble states that a college or university “president, dean, provost or other senior official” may request the extension. The Director of EHS can sign the letter along with a senior official, but not instead of one, unless your institution considers your Director of EHS a senior official.

### ***If we are planning to submit our Top Screens by building, do we need to file for an extension by building?***

No. One extension request will cover the entire entity as you define it. For example, you may request an extension for Generic University, to cover the entire campus or for State University System, to cover all of the institutions within that system.

### ***Does a for-profit university qualify as a college/university or a business?***

The preamble does not differentiate between for-profit and non-profit institutions.

### ***Are colleges and universities the only types of facilities allowed to request an extension for the Top Screen?***

Page 65412 of the preamble states, “First, DHS is providing colleges and universities with the option to request an extension of time to complete and submit their Top Screens following the publication of Appendix A.” It is silent on other industries. However, the FAQ list on the DHS website provides contact information for requesting an extension, and does not appear to limit this to colleges and universities. DHS has stated that it would automatically approve of a 60-day extension for colleges and universities.

### ***To whom do I send a request for an extension?***

The template on the CSHEMA website includes the name and address. However, you may send your request to:

Regular mail:

Robert B. Stephen  
Assistant Secretary for Infrastructure Protection  
U. S. Department of Homeland Security Office of Infrastructure Protection  
Washington, DC 20528

For Fed Ex, UPS, etc:

Robert B. Stephen  
Assistant Secretary for Infrastructure Protection Office of Infrastructure Protection  
Mail stop #8540  
U. S. Department of Homeland Security  
245 Murray Lane, SW, Building 410  
Washington, DC 20528

### ***I sent my extension request to the wrong person. Do I need to resend it?***

Your request will likely get to the right person. However, to be safe, DHS suggests sending a copy of the letter (no need to rewrite with the appropriate name on the letter itself) to the correct address (see above).

## **CFATS Overview**

### ***What are the steps involved with complying with the CFATS rule?***

Complying with the Chemical Facility Anti-Terrorism Standard proceeds in several steps:

1. Survey your campus for Chemicals of Interest (COI). Determine if your campus has COI above Screening Threshold Quantities (STQs). Consider what your campus had on site in the last 60 days. If your campus does not exceed STQs, no further action is needed. Document your efforts.
2. If your facility exceeds STQs, complete the Top-Screen. The Top-Screen is a web-based application that is part of the Chemical Security Assessment Tool (CSAT) on the DHS website. Use of the CSAT requires registration for each facility, identify the individuals fulfilling various roles, including the Preparer, Submitter and the Authorizer. It is expected to take approximately 30 hours to complete. Although your Top-Screen will be submitted electronically, you will need to print out a pdf version, sign it and submit it to DHS.
3. A computer-based system evaluates your Top Screen and immediately informs whether your facility is “not regulated” or “may be regulated”. If it is not regulated, DHS will

send a confirmation letter. Otherwise, DHS will send a follow-up letter informing that the facility is not regulated or directing your institution to conduct a Security Vulnerability Assessment (SVA).

4. DHS requests “may be regulated” campuses to conduct a Security Vulnerability Assessment. This is part of the CSAT materials, but DHS is working with colleges and universities to make it more appropriate for campuses.
5. DHS assigns a risk tier of 1 (high) to 4 (low) based on the level of risk. This information is confidential.
6. Campuses with a risk tier of 1 to 4 develop a site security plan. Current security measures may be sufficient. CSHEMA, NACUBO and COGR are working on templates for these plans.

Each of these steps is discussed in greater detail elsewhere in this document.

### ***Does this rule only apply to laboratories?***

No, this rule applies to any facilities that possess (or later possess) the chemicals listed in Appendix A in quantities that meet or exceed the STQ. This might include locations such as heating and cooling plants, art studios, nanofabrication facilities, and agricultural stations and farms.

## **Laboratory Exclusion**

### ***What is the Laboratory Exclusion?***

For chemicals in the Release Category only (not Theft or Sabotage), COIs “that a facility manufactures, processes, or uses in a laboratory at the facility under the supervision of a technically qualified individual” do not count toward the STQ.

The rule does not specifically define a laboratory, but does exclude “specialty chemical production; manufacture, processing, or use of substances in a pilot plant scale operations; or activities, including research and development, involving COI conducted outside the laboratory.”

Thus, Release chemicals in teaching labs and research labs do not count toward the Release STQs. Some COIs have Theft STQs or Sabotage STQs in addition to the Release STQ. Lab chemicals DO count toward the STQ for Theft or Sabotage.

Page 65402 of the preamble contains the definition of a “technically qualified individual”. In short, this person must be familiar with the hazards of the chemical, can enforce safe use of those chemicals and is responsible for ensuring that the chemicals are properly procured, stored, used and disposed. This may include laboratory supervisors, EHS personnel and/or stockroom supervisors, depending on the scope of their responsibilities.

According to conversations with DHS, stockrooms that are part of the laboratory are part of the exclusion. A chemical stockroom that is not associated specifically for laboratory operations would not be part of the exclusion and COIs in these stockroom count toward the Release STQs.

For example, if your institution has a stockroom specifically for the Chemistry Department laboratories, the materials in that stockroom would not count toward the Release STQs, but would count toward the Theft STQ. If your institution has a central stockroom that serves labs and non-lab operations, the materials in that stockroom would count toward the Release STQ and the Theft STQ. If a laboratory has its own stockroom, the materials in that stockroom would not count toward the Release STQ, but would count toward the Theft STQ.

***Are stockrooms considered “Laboratories” for the Release exemption?***

According to conversations with DHS, stockrooms that are part of the laboratory are part of the exclusion. A chemical stockroom that is not associated specifically for laboratory operations would not be part of the exclusion and COIs in these stockroom count toward the Release STQs. In all cases, the stockroom would need to be under the supervision of a technically qualified person.

For example, if your institution has a stockroom specifically for the Chemistry Department laboratories, the materials in that stockroom would not count toward the Release STQs, but would count toward the Theft STQ. If your institution has a central stockroom that serves labs and non-lab operations, the materials in that stockroom would count toward the Release STQ and the Theft STQ. If a laboratory has its own stockroom, the materials in that stockroom would not count toward the Release STQ, but would count toward the Theft STQ.

***Is a photographic studio that uses nitric acid for development considered to be a laboratory?***

The rule does not specifically define a laboratory. It relies on the EPA Risk Management Plan definitions of “laboratory scale”. It is not clear whether photo development would count. However, given CSHEMA’s experience trying to include photo development and art studios as laboratories, it would likely be in the best interest of the institution not to apply the laboratory exemption to photo developing. Remember, the lab exclusion applies only to the “Release” category. “Theft” COIs need to be counted in or out of a lab.

***How does this apply to pharmaceutical labs in a clinical setting?***

Page 65402 of the preamble includes the laboratory exemption for Release COIs. It does not include “specialty chemical production; manufacture, processing, or use of substances in a pilot plant scale operations; or activities, including research and development, involving COI conducted outside the laboratory.” If the pharmaceutical lab in a clinical setting meets those specifications, it must count its lab chemicals in the Release category and the Theft category.

Otherwise, the exclusion applies and the lab does not count chemicals in the Release category, but does count them in the Theft category.

***Are there any specific provisions or exclusions for hospitals?***

Hospitals, clinics and healthcare facilities do not have any specific provision or exclusion in the preamble to Appendix A.

***Are cleanroom gas storage rooms considered laboratory use?***

If the gases are piped from the storage room into the area of the lab that uses the gas, they would be considered part of the laboratory and would be exempt from the STQs in the Release category, but would count in the Theft category.

Otherwise, the storage room might be considered a stockroom and fit under that exclusion, as long as all of the gases are for laboratory use and the storage room is supervised by a technically qualified individual.

## **Other Exclusions**

***Are there other exclusions for Chemicals of Interest?***

Yes. In addition to laboratory chemicals (which are only excluded for the Release category), the following are exempt from all categories:

- Chemicals used as a structural component (e.g., aluminum)
- Products used for routine janitorial maintenance
- Chemicals contained in food, drugs, cosmetics, or other personal items used by employees
- Used in process water or non-contact cooling water as drawn from environmental or municipal sources.
- Used in air either as compressed air or as part of combustion.
- Contained in articles
- Solid wastes (including hazardous wastes) regulated under RCRA, except P and U listed wastes
- Found in naturally occurring hydrocarbon mixtures prior to entry of the mixture into a natural gas processing plant or a petroleum refining process unit.

***Does “janitorial products” strictly mean cleaning products or could it mean other types of maintenance products?***

DHS does not further define janitorial products. However, the individuals at the CSAT Helpdesk suggest that this was intended to include materials that are ubiquitous across a college campus, found in janitorial closets throughout a facility.

### ***Are RCRA wastes excluded from all categories of COIs?***

Yes. DHS exempts COIs in solid waste (including hazardous waste) regulated under the Resource Conservation and Recovery Act (RCRA). This exclusion does not apply to waste covered by 40 CFR Part 261.33 which states, “discarded commercial chemical products, off-specification species, container residues, and spill residue thereof” and refers to P and U-listed wastes. DHS notes that “this can include virtually pure chemicals, including off-specification products that may be merely inconsistent with a customer’s specifications, that have been discarded.”

### **Chemicals of Interest**

#### ***How do I read the Chemical of Interest Table?***

Chemicals of Interest (COI) are divided into three main categories: Release, Theft and Sabotage. Each category has completely separate rules for how one calculates the quantity of chemicals to compare with the Screening Threshold Quantities (STQ). Each category has its own STQ and minimum concentration. The seven categories on the right of the table provide the security issue that is the basis of the chemical’s inclusion on the list. This is particularly important when counting Release Chemicals.

There are different counting rules for the following categories:

- Release Flammables – laboratory chemicals are excluded, but all other inventory is included. Mixtures count only if the NFPA rating is 4, in which case you count the entire quantity of the mixture toward the STQ calculation
- Release Toxic – laboratory chemicals are excluded, but all other inventory is included. For mixtures, multiply the total quantity by the concentration of the COI to include only the weight of the COI toward the STQ calculation
- Release Explosive – laboratory chemicals are excluded, but all other inventory is included. Count the entire quantity toward the STQ calculation
- Theft – count only materials in transportation packaging
- Sabotage – count only materials that are shipped

#### ***Do any COIs have more than one STQ?***

Yes, some chemicals have different STQs based on the risk category. For example, hydrogen sulfide is listed with an STQ of 10,000 lbs. (minimum 1% concentration) in the Release risk category and 45 lbs. (minimum 23.73% concentration) in the Theft category.

### ***How do I count Release – Flammable Chemicals?***

As with all Release COIs, the total is cumulative of all chemicals in your facility. This EXCLUDES laboratories.

For mixtures that include Release-Flammable COIs in concentrations of at least 1%, if the mixture has an NFPA flammability rating of 4, you must count the entire quantity of the mixture toward your total. If the mixture has an NFPA flammability rating of 1, 2 or 3, you do not count the mixture at all.

For example, if you have 1000 lbs of a mixture containing 5% pentane, and that mixture has an NFPA flammability rating of 4, you would count 1000 lbs toward the STQ of 10,000 lbs. If that same mixture had an NFPA flammability rating of 3, you would not count any of it toward the STQ. If the mixture contained less than 1% pentane, regardless of the NFPA flammability rating, you would not count it toward the STQ for pentane.

### ***How do I count Release – Toxic Chemicals?***

As with all Release COIs, the total is cumulative of all chemicals in your facility. This EXCLUDES laboratories.

For mixtures, count only the amount of COI in the mixture. For example, if you have 25,000 lbs of 50% arsenic trichloride, count 12,500 lbs toward the total. The STQ is 15,000 lbs; thus, the facility would not exceed the STQ for arsenic trichloride.

### ***How do I count Release –Reactive Chemicals?***

As with all Release COIs, the total is cumulative of all chemicals in your facility. This EXCLUDES laboratories.

For mixtures, count the entire amount, regardless of the percentage of COI in the mixture.

### ***How do I count Theft Chemicals?***

The total is cumulative of all COIs in your facility, including laboratories. Count only COIs in “transportation packaging”. This includes all original, portable containers. It excludes chemicals in beakers, test tubes, apparatus, equipment, non-portable tanks, etc.

### ***What is “transportation packaging”?***

For the Theft category count all COIs that are in their original containers, regardless of whether they are in the shipping container (e.g., cardboard box). For example, you do need to count the original containers of nitric acid on the shelf in a lab.

The objective of limiting theft COIs to "transportation packaging" was to include containers of chemicals that could easily and "safely" be stolen and exclude COIs in beakers, test tubes, squirt bottles, equipment, lab apparatus, and non-portable tanks.

We have shared this information with an attorney from the American Council on Education, who confirmed that after reading all of the relevant information, she would advise colleges and universities to include original containers of COIs in their inventories. Excluding them could result in non-compliance

Here is the text from two e-mail communications with DHS...

(1) "In response to your question regarding 'Transportation package', the following guidance has been provided: Consider a transportation package as a package that can contain the contents of the chemical without causing undue harm to a person or people who may attempt to steal the chemical. A bottle outside of a box is such a package."

(2) "I am not sure who you have spoken to before, but I believe that they are getting hung up on the idea of transportation package as being a DOT regulated package. DOT defines packaging as a receptacle and any other components or materials necessary for the receptacle to perform its containment function. The list of examples provided in the Final Rule is not a complete list, but only examples. However, in those examples, it mentions bottles inside or outside of box. A bottle outside of a box does meet the DOT definition of packaging, that it is able to perform its containment function. I hope that this clears up the issue of what is a transportation package."

***Do you count chemicals in beakers in labs?***

No. Laboratory chemicals do not count toward the Release category and don't count toward the Sabotage category unless shipped. Laboratory chemicals count toward Theft COIs if they are in "transportation packaging", which includes the original bottle or container, but does not include beakers, test tubes, chemicals in apparatus, etc.

***If a lecture bottle of bromine trifluoride is connected to equipment, would this be exempt from counting in the Theft category?***

DHS does not specifically address this issue; however, if the lecture bottle could easily be disconnected and removed from the lab, it could count. If the researcher disconnected it, it would count. Thus, it is likely in the institution's best interest to count it toward the STQ.

***What is meant by CUM 100 g?***

For the chemical weapons and chemical weapons precursors in the Theft category, the minimum concentration and STQ is designated as CUM 100g.

For each facility, add together the total quantities of all of these materials. For example, if a facility has 25 g of sulfur mustard, 40 g of chlorosarin and 50 g of tabun, you add together the quantities of all three materials to determine the amount toward the STQ:

25 g + 40 g + 50 g = 115 g  
This exceeds the 100 g STQ.

### ***How do I count “Sabotage Chemicals”?***

For chemicals in the “Sabotage” category, a facility only counts those materials that it ships. Do not count these chemicals if your facility simply receives and uses them. Do count them if you have shipped them within the last 60 days. If you have not shipped them in the last 60 days, do not include them in the Top-Screen. However, if you subsequently ship them, technically you must complete a new or updated Top-Screen within 60 days. DHS is mostly concerned about facilities that regularly ship such materials, and it is extremely unlikely that your institution would be assigned a risk tier just for occasional shipments of these materials. Use your best judgment.

The STQ for Sabotage chemicals is “APA” or A Placarded Amount. See the FAQ for APA for more information. The STQ will either be “any amount” or 1,001 lbs, depending on the amount that requires placarding according to the DOT Hazardous Materials Table (49 CFR Part 172).

RCRA wastes are exempt, with the exception of P and U listed wastes. There are three chemicals listed as Sabotage chemicals that have an STQ of “any amount” and are P or U listed wastes. These include:

Acetone cyanohydrin as 2-methylactonitrile (P069)  
Aluminum phosphide (P006)  
Phosphorus pentasulfide (U189)

There is no need to review manifests for these materials older than 60 days. If you subsequently do ship one of these three materials as hazardous waste (note, they may be components of spent materials and not be listed as U or P, in which case they do not count – only if they are disposed as off-spec P or U listed wastes), you have 60 days to update your Top-Screen or submit an initial Top-Screen.

### ***What does “A Placarded Amount” mean for the STQ for Sabotage Chemicals?***

“A Placarded Amount” or APA references the DOT Hazard Materials Table (49 CFR 172.101) and indicates the amount of the material that would require placarding for transportation. DHS uses this threshold as the STQ. For all of the materials on the Sabotage list, the APA is either “any amount” or 1001 lbs.

There is an Excel spreadsheet and an Access database on the CSHEMA website with tables that include these APAs. To determine the APA, go to the DOT Hazardous Materials Table. Look up the COI. If the “placard advisory” has an asterisk (basically, if it is a Poison Inhalation Hazard), the APA is “any amount”, regardless of whether the toxicity is the primary or secondary hazard. Otherwise, it is 1001 lbs.

***For Sabotage chemicals, does “shipping” include hazardous waste?***

RCRA wastes are excluded from all COI categories, with the exception of P and U listed wastes. There are three chemicals listed as Sabotage chemicals that have an STQ of “any amount” and are P or U listed wastes. These include:

Acetone cyanohydrin as 2-methylactonitrile (P069)

Aluminum phosphide (P006)

Phosphorus pentasulfide (U189)

There is no need to review manifests for these materials older than 60 days. If you subsequently do ship one of these three materials as hazardous waste (note, they may be components of spent materials and not be listed as U or P, in which case they do not count – only if they are disposed as off-spec P or U listed wastes), you have 60 days to update your Top-Screen or submit an initial Top-Screen.

***To count Sabotage STQ, do I include the cumulative of all shipments or just single shipments?***

For the Sabotage COIs, the STQ is “a placarded amount”. Thus, if a shipment is not in a sufficient quantity to require a placard, it would not count. Page 65406 of the preamble states, “[a] facility meets the STQ for a sabotage/contamination chemicals of interest if it ships the chemical **and** is required to placard the chemical pursuant to the provisions of subpart F of 49 CFR 172.” (emphasis added)

***Do any COIs have STQs of “any amount”?***

There are 21 COIs in the Sabotage/contamination category with APA (a placarded amount) quantities of “any amount.” Keep in mind that the Sabotage category is only related to chemicals that are shipped. If your institution ships any of these chemicals of interest from this “any amount” category, you will need to register in the program. An example of this would be if your institution ships these chemicals from one campus to another campus. Institutions may wish to review their policies and procedures for shipping between campuses or other locations.

***What is meant by “A Commercial Grade”?***

According to the preamble, ACG means any concentration of a COI that is offered for commercial sale. Mixtures would only count if that concentration was available commercially. This varies greatly from one chemical to another.

***For “Theft” chemicals, do we count materials in compressed gas cylinders or cryogenic liquid dewars?***

Materials in compressed gas cylinders should be counted, as the cylinder is generally considered DOT transportation packaging. Dewars are generally not considered transportation packaging and there are no cryogenic liquids listed in the Theft category.

***How do you inventory COIs that are present as process intermediates, by-products and incidental production materials?***

Assuming this is in a laboratory, such materials would not count toward Release STQs (per the laboratory exemption). They would not count toward Theft STQs since they are not in original/transportation packaging. They would not count as Sabotage chemicals because they are not shipped. Thus, they would not be counted as COIs.

***How do we calculate the weight of a gas or solution or mixture?***

DHS does not specify any particular method for calculating the weight of a gas, liquid, solution or mixture. You may measure container weights or calculate using specific gravity or density or any other method that effectively calculates weight.

***What about outdoor storage of gases and cryogen related to the sabotage category?***

The Sabotage category counts only those materials that are shipped by the facility, not those that are only received and used. There are no cryogenic materials on the COI list. The security of these materials would be addressed in the Security Vulnerability Assessment and the Site Security Plan, which only occurs if, after reviewing your Top-Screen, DHS assigns a risk tier to your facility.

Nonetheless, if you have hazardous materials stored outdoors, you should ensure that they are secured in a manner consistent with the potential hazards and vulnerabilities.

***Do I need to count chemicals in underground storage facilities toward the Screening Threshold Quantity (STQ) for a COI?***

For COIs in the Release risk category, facilities must count vessels including reactors, tanks, drums, barrels, cylinders, vats, kettles, boilers, pipes, hoses or other containers. Facilities must also count COIs in below-ground storage facilities.

**Specific Chemical Questions**

***How do I count Propane?***

Propane is listed in the Release category with an STQ of 60,000 lbs. Only propane in tanks that hold more than 10,000 lbs should be counted toward the STQ. For example, if your campus has 8 tanks of propane, each with a capacity of 5,000 lbs and one tank with a capacity of 15,000 lbs, the total quantity of propane that counts toward the STQ is 15,000 lbs. You would not count any of the propane in the 5,000 lbs tanks.

***For propane, do you count the amount normally in the tank or the capacity of the tank?***

Count the amount normally in the tank.

***How do I count Ammonium Nitrate?***

Ammonium nitrate (AN) has two separate entries. The first is AN as an explosive and refers to AN with more than 0.2% combustible substances. The STQ for Release (as an explosive) excludes AN in labs and is set at 5,000 lbs. The STQ for Theft (which does include AN in labs) is 400 lbs.

The second entry is for AN as a solid, with a nitrogen content of at least 23%, most commonly found as a fertilizer. There is no release category for this form of AN. The STQ for Theft (which includes labs) is 2,000 lbs. Only count solid AN with a minimum concentration of 33%. Be careful not to confuse *nitrogen content* with *ammonium nitrate concentration*.

***Potassium nitrate is found in various concentrations in many commercial fertilizer blends. How do we determine what concentration would be considered “commercial grade” potassium nitrate?”***

Basically, any chemical sold as “potassium nitrate” would be considered a commercial grade. We are awaiting further information from DHS.

***Do I need to count butane in lighters, propellants in spray cans, etc?***

Probably not. The minimum concentration for butane is 1%. Even for the referenced materials that have a butane content above 1%, it is extremely unlikely to have more than 10,000 lbs on your campus and does not meet the intent of the standard.

***Are potassium cyanide or sodium cyanide considered Poison Inhalation Hazards according to DOT rules?***

According to the DOT Hazardous Materials Table, these chemicals are not Poison Inhalation Hazards. Thus, the APA for both is 1,001 lbs.

***Does chlorine include chemical types of chlorine used in swimming pools?***

Chlorine listed in the COI table is the chemical with a Chemical Abstract Service number 7782-50-5, which is a gas. Some swimming pool chlorination systems use chlorine gas. Sodium hypochlorite and other compounds that contain chlorine would not count, unless specifically listed as a COI. Be sure to check the CAS number of any COI before counting it.

***Do I count ammonia compounds that are not listed as COIs? Would they count as ammonia based on their ammonia content?***

No. The ammonia listed as a COI is CAS number 7664-41-7. The only ammonia compounds included as COI are ammonium picrate and ammonium perchlorate. No other ammonia compounds count, regardless of their ammonia content.

***Do nitrocellulose filters count as COIs?***

No, nitrocellulose filters are not considered commercial grade nitrocellulose.

***Will there be a provision for biological or radioactive materials?***

The Chemical Facility Anti-Terrorism Standards apply only to the Chemicals of Interest in Appendix A. The rule does not cover biological or radioactive materials. Instead, as of now, DHS relies on the National Institutes of Health, Centers for Disease Control and Prevention, US Department of Agriculture and the Nuclear Regulatory Commission to issue guidance on such materials.

***Do I need to count explosives in magazines toward the STQ for a COI?***

Facilities must include COIs in magazines as defined by the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF). This definition is “any building or structure, other than an explosives manufacturing building used for storage or explosive material.”

## **Surveying Your Campus**

***Is the Top-Screen intended to be a snapshot or a continuous inventory?***

The Top-Screen is meant to be a snapshot of what has been on your campus in the last 60 days. However, if your inventory changes significantly and exceeds STQs in the future, you will need to complete an initial Top-Screen or update your Top-Screen within 60 days.

***What types of chemical inventory systems are colleges and universities using?***

There are a number of commercial systems available. Some colleges and universities have developed their own systems. While this FAQ is not the appropriate medium for collecting such information, perhaps those interested in this question might post it on the CSHEMA listserve.

***If I plan to dispose of or remove a COI from my facility before the Top Screen deadline and do not intend to replace it, do I need to include it in the Top Screen?***

The Top Screen survey tool asks for COI in your facility in the last 60 days. Technically, even if the chemical has been removed and will no longer be kept on site in quantities at or above the STQ, if it was on your campus 60 days prior to your submission, it should be included.

However, the intention of the Top Screen is to determine the risk posed by what is typically on your campus. Thus, you should use your best judgment as to what to include or exclude. If you have filed for an extension and the materials are removed (and will not be replaced) prior to the extension period, the timing of your submission may impact what you include on the Top Screen.

***Do I need to do an inventory of every container of the Chemicals of Interest (COI) on our campus?***

,Where exclusions do not apply, all containers of a chemical would need to be counted toward the STQ for the Top-Screen location. College and universities with chemical inventory systems that identify the largest quantity of a chemical in a twelve month period may not need to conduct an additional inventory. For others, a review of the COI list by the campus' chemical experts (e.g., science faculty, facilities staff, EH&S staff) may allow for narrowing in on a limited list of chemicals. Some colleges and universities may find it necessary to conduct a more extensive inventory of all laboratories, storerooms and other locations where chemicals are used or stored to determine if STQs are met or exceeded.

***Our inventory changes frequently. How do I decide the quantity to report for the STQ?***

The STQ is based on the largest quantity in the last 60 days. For example, if a chemical is possessed in the highest quantity in September and that quantity meets or exceeds the STQ, that quantity should be counted even if there are lesser amounts in possession at other times of the year.

***How can we track changes in chemicals and/or amounts?***

There are many commercially available and homemade inventory programs that might be of use to an institution. This issue is up to the individual institution.

***Our campus is already regulated by OSHA, EPA, NRC or the related state plans? Are we exempt from reporting to DHS?***

DHS does not provide exemptions because of other regulations.

## **Defining "Facility"**

***How does DHS define a "facility"?***

DHS has given all facilities, including colleges and universities, flexibility in defining the boundaries of their facility. A facility may be an entire campus or building by building. The smallest boundary is a single building (see page 65412)Because of the way the Top-Screen is completed, the institution will need to give a street address and the longitude and latitude coordinates of the facility. Thus, one cannot define a facility as a floor of a building or a room within a building.

How one defines their facility will vary depending on their inventory and the idiosyncrasies of their institution. DHS has cautioned that the strategy that is chosen should be reasonable and complete and not submitted in a way to avoid the rule's requirements.

***Can a facility be defined as an individual building and would the STQs be calculated just for that building?***

Yes, you may break your campus down to individual buildings for reporting. In this case, you would calculate STQs only for the materials in that building. This might prove helpful if, for example, you find that you exceed STQs for nanofabrication gases in one building, but not in any other and, a separate building may be the only one that exceeds the STQ for nitric acid. In this case, you would complete two Top-Screens – one for the building with the gases and another for the building with nitric acid. This might be an effective way to deal with the Top-Screen.

***Could a facility be defined as a subset of your campus, e.g., schools (School of Engineering, School of Arts and Sciences) or clusters of buildings?***

The rule allows facilities to define their own boundaries in whatever way makes the most sense to the institution. The smallest entity that can be a facility is a single building.

***For campuses that have remote facilities, like farms or a military base, is it recommended to consolidate them as one facility or view that as individual facilities?***

This is a decision that the institution should make after conducting its survey. The institution may choose the boundaries of the facility. If the remote facility has no COIs above STQ, then it would make sense not to include them in with the main campus. If it does have COIs above STQ, it might be advantageous to submit separate Top-Screens for main campus and the remote campuses. Look through the Top-Screen questions to determine the complexity of submitting one or separate Top-Screens.

***Can a steam plant on your campus be defined as a facility?***

Yes, you may define the boundaries of your facility in whatever way works best for your institution as long as it is no smaller than a single building

***How will DHS address multi-occupant research facilities or landlord-tenant issues?***

DHS does not give guidance as to which entity is required to submit the Top Screen. However, DHS does give instructions on how to complete the form for such instances:

Choose the appropriate description regarding the facility's relationship to other businesses on its property (has a tenant onsite; is a tenant on another company's property, or is the sole tenant on its own property). A facility that is co-located shares a common perimeter with another company's facility through either a host or a tenant agreement. If a facility does not share a site with another company's facility it is the sole tenant.

If the facility hosts an unrelated tenant onsite or is an unrelated tenant, enter the name of the host or tenant facility and its EPA RMP Identifier, if applicable. Add additional rows, if necessary. If the facility is a sole tenant on its property, leave this field blank.

***Do we need to track contractors on site (e.g., construction)?***

If the materials are on your campus, they will need to be considered either by the contractor or by your institution. How that is completed is up to your institution and the contractor. If there are COIs above STQs, one could treat the area as a separate facility or include it in the institution's Top-Screen.

**Completing the Top-Screen**

***How do I get access to the Top-Screen form?***

The DHS Chemical Security Assessment Tool (CSAT) which includes a Facility Registration Questionnaire, the consequence screening questionnaire (Top-Screen), the Security Vulnerability Assessment (SVA) tool and the Site Security Plan (SSP) tool is available on the DHS website at [http://www.dhs.gov/xprevprot/programs/gc\\_1169501486197.shtm](http://www.dhs.gov/xprevprot/programs/gc_1169501486197.shtm) . A User Guide is also available.

You will need information about your facility, including the name, address, county, latitude and longitude. Submit the information, print the form and mail or fax it to DHS. DHS will e-mail the usernames and passwords. There are specific security settings required for your web browser.

***Can we get a list of all of the Top-Screen questions in a printable format?***

Yes, the DHS website has a 111-page pdf document with all of the Top-Screen questions at [http://www.dhs.gov/xlibrary/assets/chemsec\\_csattopscreenquestions.pdf](http://www.dhs.gov/xlibrary/assets/chemsec_csattopscreenquestions.pdf).

***What type of information will we need in order to complete the Top Screen?***

You will need to have the facility location (including address, longitude and latitude), owner/operator information, regulatory mandates (MTSA, Safe Drinking Water Act, NRC, etc), number of full-time employees and contractors and any previous security vulnerability assessments, including an explanation of the methodology used.

For chemical information, you will need to have the list of COIs above STQ and, depending on the category:

- Total quantity on site
- Total quantity in area of highest quantity
- Distance of concern
- Type of portable/storage container

***Who may complete the Top-Screen form? Are there any special requirements for individuals who complete the Top-Screen?***

Each college/university will need to decide who should prepare and submit the Top-Screen since DHS provides only general criteria. There are three required roles and one optional role related to the preparation and submission of the Top-Screen: the Preparer, authorized by the company to

enter the data but not submit; the Submitter, certified by the company to formally submit the data; and the Authorizer, empowered by the company to provide assurance that the Submitter and Preparer are valid. All must be resident in the U.S.

The Submitter and Authorizer must be an officer of the company or designated by an officer of the company. The Reviewer, an optional role, must be a U.S. citizen. One person can fulfill all of these roles or there can be combinations of individuals fulfilling these roles. The CSAT User Registration User Guide provides more detail. Keep in mind that the Top-Screen is considered to be security vulnerability information so the individuals in these roles may need to take the online DHS training.

***Can one person register multiple users of the CSAT?***

Yes. When a person registers for the Chemical Security Assessment Tool (CSAT), he or she may register all of the individuals who will have a role in the Top-Screen.

***Can we outsource this work – hire someone to complete our Top Screen?***

Technically, the Preparer and/or Submitter could be a person hired by your college or university for this purpose. He or she would need to be designated by your institution, must complete the CVI training and would now have access to “security vulnerability information” for your campus.

***How does the Authorizer come into play in the submittal process?***

The Authorizer certifies that the individuals listed as Submitters and Preparers have been selected by the institution to enter, edit and submit the CSAT information. They can view the information, but cannot enter or edit the information in the CSAT system.

***Can we provide the Top Screen information and/or other CVI information to an insurance underwriter?***

The materials used to prepare the Top Screen are not protected by as Chemical-terrorism Vulnerability Information (CVI). The Top Screen, Security Vulnerability Assessment, communications from DHS, etc. designated as CVI may only be shared with individuals who have a “need to know” and have been trained and authorized to view them.

***Can we/should we register even if we do not expect to be required to submit a Top-Screen?***

There is no added benefit to registering for the Top-Screen if you do not expect to submit one. However, you may register, receive a username and password, and not submit a Top-Screen.

***If we find that we do not need to submit a Top-Screen, should we notify DHS?***

DHS is not interested in receiving letters or reports stating that a facility conducted a survey and found that it does not need to submit a Top-Screen. It is good practice to keep records of how

you came to that conclusion, in the unlikely event that DHS or others question why you did not submit a Top-Screen.

***If we do not submit a Top-Screen, will there be a subsequent inspection to verify our decision?***

DHS expects that at least some medium size and many large colleges and universities will need to complete a Top-Screen. DHS has the authority to request that a facility complete a Top-Screen if they have not done so. They may also question a facility asking why they did not submit a Top-Screen. These scenarios are very unlikely, but possible.

It is recommended that whether or not you submit a Top-Screen, you keep records explaining how you went about collecting the information and making the decision to submit the Top-Screen.

***Will DHS be cross-checking with chemical manufacturers to determine whether a facility has purchased COIs above STQs?***

DHS has not outlined plans for tracking STQs on the supply side.

***How do I decide what the Area of Highest Quantity (AHQ) is?***

The Top Screen guidance introduces another concept that they use to evaluate the hazard associated with chemicals on site, the AHQ (Area of Highest Quantity). The AHQ tries to take into account the fact that if a chemical is distributed over a wide area in a facility it will probably be less of a risk during a terrorist attack, because it will be harder to release all of that chemical. To determine the AHQ you must determine where the largest concentration of the chemical is within a circle of a diameter of 170 feet. Thus, if there were a number of storage tanks on site, but were widely scattered you would use the largest tank or combination of tanks that would be in a single 170 foot diameter circle to determine the AHQ amount.

There is a worksheet available to calculate the area of highest quantity in Attachment A of the CSAT Top Screen User Manual  
([http://www.dhs.gov/xlibrary/assets/chemsec\\_csattopscreenusersmanual.pdf](http://www.dhs.gov/xlibrary/assets/chemsec_csattopscreenusersmanual.pdf)).

***How do I determine the Distance of Concern?***

For each listed toxic chemical, the distance of concern that should be reported is the downwind distance calculated using RMP\*Comp for the regulated chemical's total onsite quantity, using additional process conditions for this chemical. Report all distances shorter than 0.1 mile as 0.1 mile, and all distances 25 miles or greater as 25 miles.

There is a worksheet available to calculate the distance of concern in Attachment A of the CSAT Top Screen User Manual  
([http://www.dhs.gov/xlibrary/assets/chemsec\\_csattopscreenusersmanual.pdf](http://www.dhs.gov/xlibrary/assets/chemsec_csattopscreenusersmanual.pdf)).

***Do Top Screen Preparers Need to be concerned with Chemical Vulnerability Information (CVI) security training?***

Yes, the preparer will need to complete CVI training.

***How often will I have to complete the Top-Screen?***

DHS requires the submission of a Top-Screen if the facility comes in to possession of any COI in a quantity that meets or exceeds the STQ. The Top-Screen must be submitted within 60 days of possessing the chemical in that quantity. The rule does not require a college or university to maintain an ongoing inventory although it will be prudent to monitor future purchases, storage and use of COIs to determine if STQs are met or exceeded. It is not clear how often Top-Screens will have to be updated.

***When is the information collected for the Top-Screen considered CVI? Does this mean it can not be shared?***

The information used to prepare the Top-Screen is never considered Chemical-terrorism Vulnerability Information (CVI). However, the Top-Screen submission and subsequent communications from DHS are considered CVI. The Security Vulnerability Assessment, Risk Tiers and Site Security Plans are all considered CVI.

Once information is considered CVI, it can only be shared with individuals who have received CVI training, are authorized to receive it and have the “need to know”. This information is further explained in the required CVI training.

***Please explain the implications of not being a US citizen.***

The Preparer, Submitter and Authorizer must be domiciled in the US, but do not need to be US citizens. The Reviewer needs to be a US citizen.

***The website states that the CSAT User Manual will be updated soon to reflect changes to Appendix A. When is this expected?***

The version on-line is usable now. It will be updated by the end of December 2007.

## **Security Vulnerability Assessment**

***What is involved with completing the Security Vulnerability Assessment (SVA)?***

The CSAT materials include information about the SVA. This process is not directly applicable to colleges and universities. DHS will continue to work with the University Working Group to improve this process for higher education.

***When is the Security Vulnerability Assessment (SVA) done – before or after the risk Tier is assigned?***

After an institution submits a Top-Screen, they will receive a communication from DHS stating that they are “not regulated” or “may be regulated”. For those in the latter category, DHS will notify the institution that they must conduct the SVA, along with guidelines and a timeline. Once the SVA is complete, DHS will assign a risk Tier.

***What is the likelihood that a college or university will be assigned a risk tier?***

DHS expects to receive approximately 50,000 Top-Screen submissions. Of them, they estimate 5,000 to 8,000 will be tiered. It is possible that some colleges and universities will be tiered, but the majority will likely screen out.

***If we are required to do a Security Vulnerability Assessment, is there a timeline associated with that?***

DHS will contact you individually with such information. There is no specific timeline listed in the rule.

## **Site Security Plans**

***How will I know if I have to develop a Site Security Plan?***

DHS will review the Top-Screen submissions and determine if a college or university presents a high level of security risk. Facilities that are determined to not present a high level of risk will be notified by DHS that they are no longer covered by the regulatory program. DHS anticipates that many academic institutions will not be found to present a high level of risk. Colleges and universities that are found to present a high level of risk will have to comply with the substantive requirements of CFATS. This will include preparation of a Security Vulnerability Assessment and development of a Site Security Plan. CSHEMA and several other higher education organizations are working with DHS on these phases of the program.

***Will colleges and universities be expected to follow the guidelines for Site Security Plans detailed in the Interim Final Rule?***

DHS recognizes the fact that the security planning guidelines in the Interim Final Rule is not appropriate for colleges and universities. As a result they expect that colleges and universities will develop Alternative Security Plans. CSHEMA, NACUBO and COGR are currently working on templates for this purpose. These templates will be reviewed and approved by DHS.

***If an institution decides to define a facility as an entire campus, will security plans likely be limited to the area where the COI is located or to the entire campus?***

Most likely, the security plan would be limited to the area(s) where the COIs are located. Please note that DHS can ask an institution to conduct a Security Vulnerability Assessment and Site Security Plan that extends beyond the area defined as a facility. Thus, if you designate your Chemistry Building as a facility, the SVA and security plans may need to include a building adjacent to it, at the discretion of DHS.

***Can the DOT Security Plan be used as a basis for the Security Vulnerability Assessment?***

If your institution is required to do a Security Vulnerability Assessment (SVA), it will need to follow the guidelines provided by DHS. There are currently no guidelines specific to colleges and universities. The DOT Security Plan may be an element of the SVA, but DHS has not issued specific instructions at this time.

***Has DHS clarified the Nuclear Regulatory Commission's (NRC) licensee security order exemption regarding security?***

DHS has stated that areas covered by NRC security requirements are not included in the Security Vulnerability Assessment or Site Security Plan development. This includes only the "security envelope" defined in the NRC plan. For example, if you have radioisotopes in the lab and the only requirement is to keep the materials in a lock box, the lock box is exempt from the assessment and planning. If there is a larger source, where the NRC security plan includes an entire room, that room is excluded from the DHS assessment and plan. An entire facility would not likely be exempt.

***Does DHS have a list of facilities that have been designated as "critical infrastructure"?***

DHS has not published or discussed such a list; however, a number of state Homeland Security groups have identified some colleges and universities as such. In some cases, this is due to the sports complexes or functions other than laboratory operations.

**Other**

***What are the penalties for non-compliance?***

According to §27.300(3), non-compliance with the CFATS rule may result in penalties of not more than \$25,000 for each day during which the violation continues.

***Will federal funding for various activities be tied to the Top-Screen process?***

DHS has not suggested that federal funding or any other activities other than assessing security risks is tied to the Top Screen.

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*Please Note: This information reflects the most accurate information available as of the date posted below. The information may be reviewed by the U.S. Department of Homeland Security, Office of Infrastructure Protection and is subject to revision. Please check this location frequently for updated versions.*

Version: 2

Date: December 12, 2007